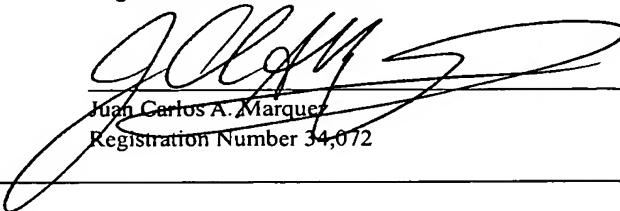


## U.S. DEPARTMENT OF COMMERCE PATENT &amp; TRADEMARK OFFICE

CUSTOMER NUMBER: 38327

Form PTO 1390 REV (01-2003)	<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. §371</b>		<i>Attorney's Docket Number</i> <b>HIRA.0178</b>
<i>International Application Number</i> <b>PCT/JP03/09438</b>	<i>International Filing Date</i> <b>25 July 2003</b>	<i>U.S. Application Number (if known)</i> <b>10/7522241</b>	
<i>Title of Invention</i> <b>A SPIN TRANSISTOR BASED ON THE SPIN-FILTER EFFECT AND A NONVOLATILE MEMORY USING SPIN TRANSISTORS</b>			
<i>Applicant(s) for DO/EO/US</i> <b>SATOSHI SUGAHARA AND MASAAKI TANAKA</b>			
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. §371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. §371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. §371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. §371(c)(2))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).             <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. §371(c)(3))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input checked="" type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. §371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An unexecuted oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. §371(c)(5)).</li> </ol> <p><i>Items 11 to 20 below concern other document(s) or information included:</i></p> <ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 C.F.R. §§1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. §§3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 C.F.R. §1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information: Request for Priority and Preliminary Amendment</li> </ol>			

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/52224</b>		INTERNATIONAL APPLICATION NO. <b>PCT/JP03/09438</b>		ATTORNEY'S DOCKET NUMBER <b>HIRA.0178</b>																															
				Applicant use	Office use only																														
<p>21. <input type="checkbox"/> The following fees are submitted:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><input type="checkbox"/> a) Basic national fee</td> <td style="width: 10%; text-align: right;">\$300.00</td> <td style="width: 60%; text-align: right;"><b>\$300.00</b></td> </tr> <tr> <td><input type="checkbox"/> b) Examination fee</td> <td style="text-align: right;">\$200.00</td> <td style="text-align: right;"><b>\$200.00</b></td> </tr> <tr> <td><input type="checkbox"/> c) Search fee</td> <td style="text-align: right;">\$500.00</td> <td style="text-align: right;"><b>\$500.00</b></td> </tr> <tr> <td colspan="2"><b>TOTAL OF ABOVE CALCULATIONS =</b></td> <td style="text-align: right;"><b>\$1,000.00</b></td> </tr> </table>						<input type="checkbox"/> a) Basic national fee	\$300.00	<b>\$300.00</b>	<input type="checkbox"/> b) Examination fee	\$200.00	<b>\$200.00</b>	<input type="checkbox"/> c) Search fee	\$500.00	<b>\$500.00</b>	<b>TOTAL OF ABOVE CALCULATIONS =</b>		<b>\$1,000.00</b>																		
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<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof																																			
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Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 C.F.R. §1.492(e)). <span style="float: right;">\$0.00</span>																																			
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">CLAIMS</th> <th style="width: 15%;">NUMBER FILED</th> <th style="width: 15%;">NUMBER EXTRA</th> <th style="width: 10%;">RATE</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>70</td> <td>50</td> <td>x \$50.00</td> <td style="text-align: right;"><b>\$2,500.00</b></td> <td></td> </tr> <tr> <td>Independent Claims</td> <td>21</td> <td>18</td> <td>x \$200.00</td> <td style="text-align: right;"><b>\$3,600.00</b></td> <td></td> </tr> <tr> <td colspan="3">Multiple Dependant Claims (if applicable)</td> <td>+ 360.00</td> <td style="text-align: right;"><b>\$0.00</b></td> <td></td> </tr> <tr> <td colspan="4"><b>TOTAL OF ABOVE CALCULATIONS =</b></td> <td style="text-align: right;"><b>\$7,100.00</b></td> <td></td> </tr> </tbody> </table>						CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE			Total Claims	70	50	x \$50.00	<b>\$2,500.00</b>		Independent Claims	21	18	x \$200.00	<b>\$3,600.00</b>		Multiple Dependant Claims (if applicable)			+ 360.00	<b>\$0.00</b>		<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$7,100.00</b>	
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<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$7,100.00</b>																															
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2 <span style="float: right;">\$0.00</span>																																			
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a. <input checked="" type="checkbox"/> A check in the amount of <b>\$7,100.00</b> to cover the above fees is enclosed.																																			
b. <input type="checkbox"/> Please charge my Deposit Account Number 08-1480 in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.																																			
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account Number 08-1480. A duplicate copy of this sheet is enclosed.																																			
d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.																																			
<b>Note:</b> Where an appropriate time limit under 37 C.F.R. §1.495 has not been met, a petition to revive (37 C.F.R. §1.137(a) or (b)) must be filed and granted to restore the application to pending status.																																			
Respectfully submitted,																																			
Stanley P. Fisher Registration Number 24,344																																			
 Juan Carlos A. Marquez Registration Number 34,672																																			
<b>REED SMITH LLP</b> 3110 Fairview Park Drive Suite 1400 Falls Church, Virginia 22042 (703) 641-4200 January 25, 2005																																			